



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,327	11/21/2001	Saad A. Sirohey	GEMS:0181/YOD (120622)	3588
7590	03/18/2005		EXAMINER CHEN, WENPENG	
Tait R. Swanson Fletcher, Yoder & Van Someren P.O. Box 692289 Houston, TX 77269-2289			ART UNIT 2624	PAPER NUMBER

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,327	SIROHEY ET AL.	
	Examiner	Art Unit	
	Wenpeng Chen	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-76 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Priority

1. The present application is a CIP of application 09/716,603, filed on 11/20/2000, which is CIP of application 9/448,950, filed on 11/24/1999. The Examiner compared the present application with applications 09/716,603 and 9/448,950 and found that (1) application 9/448,950 disclosed only materials related to Figs. 1-13 of the present application and (2) application 09/716,603 disclosed only materials related to Figs. 1-20 of the present application. Figs. 14-20 of the present application and related portions of specification disclose wavelet decomposition the first time on 11/20/2000. Figs. 21-27 of the tessellating wavelet subband data the first time on 11/21/2001.

Therefore, the Examiner concluded that the disclosure date for any subject matter related to addressing data according to decomposition level index or tessellation block indices is 11/21/2001. This conclusion will be applied for determining prior art.

Drawings

Art Unit: 2624

2. The drawings are objected to because of the following informalities.

-- Symbols "LL(1), HL(1), LH(1), and HH(1)" in blocks 580, 582, 584, and 586 in Fig. 23 shall be changed to "LL(3), HL(3), LH(3), and HH(3)". So they are in consistence with the specification.

-- In Fig. 17, "overflow condition" is checked at step 366. When there is no overflow, step 368 still performs "generate sub-bands overflow." Is it correct?

-- Fig. 6 shall be labeled.

Correction is required.

Specification

3. The disclosure is objected to because of the following informalities.

-- In page 10, the specification states that "Fig. 2 illustrates in somewhat greater detail the type of cross-referencing data made available to clients 20, 22, 24, and 30 through database server 28." Numerals 20, 24, and 24 do not refer to any client as evident in Fig. 1.

-- In page 16, the numbers after the term "the Figs" in lines 1 and 22 shall be provided.

Appropriate correction is required.

Claim Renumbering

Art Unit: 2624

4. Because there is no Claim 3, Claims 1-2 and 4-77 have been renumbered as 1-76, respectively, based on Patent Rule 1.126.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. The renumbered Claims 43 and 69-76 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to support the following feature recited in the above-listed claims:

-- Boolean tag.

The specification never discloses any teaching of Boolean tag.

Furthermore, the recitations presented in the renumbered Claims 43 and 69-76 do not provide adequate description to enable one skilled in the art use the Boolean tags because they are not taught.

Claim Rejections - 35 USC § 102

Art Unit: 2624

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2 and the renumbered Claims 3-61 and 69-76 are rejected under 35 U.S.C. 102(e) as being anticipated by Dekel et al. (US patent 6,314,452.)

a. For Claims 1-2 and the renumbered Claims 3-20, Dekel teaches a method for selective handling of image data, the method comprising:

-- addressing data according to a decomposition level index and tessellation block indices, wherein the decomposition level index refers to data sets generated by lossless wavelet decomposition, and the tessellation block indices refer to blocks tessellated from the data sets; (column 5, lines 24-46; column 5, line 60 to column 6, line 61; column 24, lines 17-21 and 58-65; Tiles are blocks that are addressable with a decomposition level index and tessellation block indices, such as shown in Eq. (1.1). Reversible wavelet transforms produce lossless wavelet decomposition.)

-- identifying an area of interest of the image according to the decomposition level index and the tessellation block indices; (column 15, line 39 to column 16, line 9; column 5, lines 24-47; column 16, lines 38-57; An area of interest ROI is selected. Based on the ROI, a request of list identifies tiles associated with an area of interest of the image according to the decomposition level index and the tessellation block indices.)

Art Unit: 2624

-- handling the area of interest identified by the decomposition level index and the tessellation block indices; (column 18, line 54 to column 22, line 35; Sections 5.3 to -5.5 show how the tiles on the request list are handled such as retrieving, decoding, and rendering.)

-- wherein the decomposition level index corresponds to a resolution level; ($t_{\text{resolution}}$ of Eq. (1.1))

-- wherein the tessellation block indices comprise a row index and a column index for addressing spatial coordinates of the blocks; (t_x and t_y of Eq. (1.1))

-- wherein the lossless wavelet decomposition comprises lossless integer wavelet decomposition; (column 24, lines 17-21 and 58-65)

-- wherein the blocks comprise a fixed block size; (column 6, lines 1-17)

-- wherein addressing comprises creating a plurality of addressable data blocks comprising a plurality of the blocks; (column 5, line 60 to column 6, line 61; column 24, lines 17-21 and 58-65; Each tile is addressable with (t_x , t_y , $t_{\text{resolution}}$) of Eq. (1.1).)

-- wherein each of the data sets comprises a hierarchical set of sub-bands, one set comprising a low frequency component at a lowest resolution level and each remaining set comprising high frequency components at successively higher resolution levels; (column 5, line 60 to column 6, line 61; column 8, line 21 to column 12, line 63; Figs. 3, 19, 20, and 21; Data of a coding block is a data set that comprises a hierarchical set of sub-bands.)

-- wherein the high frequency components of at least one of the successively higher resolution levels are tessellated into sets of the blocks for each of the high frequency components; (column 5, line 60 to column 6, line 61; column 8, line 21 to column 12, line 63; Each subband including higher resolution levels is divided into tiles.)

Art Unit: 2624

-- wherein the decomposition level index corresponds to a resolution level of the respective data sets; (t_resolution of Eq. (1.1))

-- wherein addressing comprises addressing the blocks for each of the sub-bands; (Each tile is addressable with (t_x, t_y, t_resolution) of Eq. (1.1))

-- wherein the tessellation block indices correspond to spatial coordinates of the blocks within each of the sub-bands; (t_x, t_y, t_resolution) of Eq. (1.1))

-- wherein identifying the area of interest comprises selecting at least one block of the blocks encompassing a selected area of interest; (column 15, line 39 to column 16, line 9; column 5, lines 24-47; column 16, lines 38-57; An area of interest ROI is selected. Based on the ROI, a request of list identifies tiles associated with the ROI.)

-- wherein handling the area of interest comprises retrieving the at least one block; (section 5.4 Step 704)

-- wherein retrieving the at least one block comprises retrieving the at least one block for the high frequency components at the successively higher resolution level relative to a current local resolution level at a client; (column 5, lines 24-47; column 15, line to column 16, lines 35; column 19, line 64 to column 20, line 5; High frequency tiles are retrieved for updating.)

-- combining the at least one block for each of the high frequency components with the current local resolution level to reconstruct the area of interest at the successively higher resolution level; (section 5.5 step 705 progressive rendering; column 19, line 52 to column 20, line 25)

Art Unit: 2624

-- wherein handling comprises reference marking the area of interest using the decomposition level index and the tessellation block indices; (section 5.2 step 702; column 16, line 37 to column 18, line 53; Creating the request list comprises the marking process.)

-- (1) wherein handling comprises reconstructing the image in the area of interest using the tessellation block indices to retrieve the blocks selectively from storage, (2) wherein handling comprises selectively transmitting data for at least one of the blocks corresponding to the area of interest using the decomposition level index and the tessellation block indices, (3) wherein handling comprises forming an image data stream comprising data for at least one of the blocks encompassing the area of interest; (section 5.4 step 704; column 19, lines 17-51; column 5, lines 1-47; Tiles associated with ROI are retrieved and transmitted selectively from the storage of the server.)

-- wherein forming the data stream comprises creating an addressable superblock of the data for the blocks using the decomposition level index and the tessellation block indices, each of the blocks for each of the data sets being individually addressable within the addressable superblock; (column 6, lines 7-40; Three subgroups (tiles) of hl, lh, and hh are grouped together to form a superblock. Alternatively, three components the grouped hl, lh, and hh can be considered as a superblock.)

b. For the renumbered Claims 21-35,

For the renumbered Claim 21, Dekel teaches a method for selectively displaying image data, the method comprising:

-- identifying a spatial region of interest within an image based on a plurality of addressable blocks comprising a decomposition level index and tessellation block indices,

Art Unit: 2624

wherein the decomposition level index refers to data sets generated from the image by lossless wavelet decomposition, and the tessellation block indices refer to spatial blocks tessellated from the data sets; (column 5, lines 24-47; column 5, line 60 to column 6, line 61; column 15, line 39 to column 16, line 9; column 16, lines 38-57; column 24, lines 17-21 and 58-65; Tiles are blocks that are addressable with a decomposition level index and tessellation block indices, such as shown in Eq. (1.1). Reversible wavelet transforms produce lossless wavelet decomposition. An area of interest ROI is selected. Based on the ROI, a request of list identifies tiles associated with an area of interest of the image according to the decomposition level index and the tessellation block indices.)

-- requesting a spatial group of the plurality of addressable blocks encompassing the spatial region of interest by referencing the blocks by the decomposition level index and the tessellation block indices; (column 18, line 54 to column 22, line 35; Sections 5.1 to -5.4 show the requesting process.)

-- reconstructing the image within the spatial region of interest using the requested spatial group. (column 18, line 54 to column 22, line 35; Sections 5.3 to -5.5 show how the tiles on the request list are retrieving, decoding, reconstructed for rendering.)

Dekel further teaches a method:

-- wherein requesting the spatial group comprises requesting at least one block of the spatial blocks for each of the high frequency components at one of the successively higher resolution levels relative to a current lower resolution level of the image data; (column 5, lines 24-47; column 15, line to column 16, lines 35; column 19, line 64 to column 20, line 5; High frequency tiles are retrieved for updating.)

Art Unit: 2624

-- wherein reconstructing the image comprises combining the at least one block for each of the high frequency components with the current lower resolution level to reconstruct the spatial region of interest at the successively higher resolution level; (section 5.5 step 705 progressive rendering; column 19, line 52 to column 20, line 25)

-- wherein requesting the spatial group comprises locating and retrieving each block of the spatial group from a remote storage device based on the decomposition level index and the tessellation block indices; (section 5.4 step 704; column 19, lines 17-51; column 5, lines 1-47; Tiles associated with ROI are retrieved and transmitted selectively from the storage of the server.)

-- wherein requesting the spatial group comprises recalling a local portion of the spatial group from local storage and retrieving a missing portion of the spatial group from remote storage, wherein (1) requesting the spatial group comprises tracking local presence or absence of each of the plurality of addressable blocks and (2) wherein requesting the spatial group comprises tracking local presence or absence of each of the data sets, which correspond to different image resolution levels of the image. (section 5.4 step 704; column 15, lines 17-28; column 19, lines 17-51; column 5, lines 1-47; section 5.1; column 23, lines 11-28; column 23, lines 32-43; Tiles associated with ROI are retrieved and transmitted selectively from the storage of the server. When data blocks of the highest local resolution level stored in the client cache have resolution exceeding the image resolution selected, data are recalled from the client cache. No request of data from the server is needed. When data blocks of the highest local resolution level stored in the client cache have resolution lower than the image resolution selected, blocks needs to be requested from a server. Because data blocks are stored and available at the client up

Art Unit: 2624

to the highest local resolution level for rendering the low resolution version, any resolution levels between the highest local resolution level stored in the client cache and the image resolution selected are retrieved from remote storage in the server.)

How Dekel teaches the features recited in the renumbered Claims 22-28 and 35 are shown above in the cited passages for teaching for teaching Claim 2 and the renumbered Claims 3-10.

c. For the renumbered Claims 36-48,

For the renumbered Claim 36, Dekel teaches a method for tracking image data, the method comprising:

-- addressing data using a plurality of addressable blocks comprising a decomposition level index and tessellation block indices, wherein the decomposition level index refers to data sets generated from an image by lossless wavelet decomposition; (column 5, line 60 to column 6, line 61; column 24, lines 17-21 and 58-65; Tiles are blocks that are addressable with a decomposition level index and tessellation block indices, such as shown in Eq. (1.1). Reversible wavelet transforms produce lossless wavelet decomposition.)

-- tracking presence or absence of the plurality of addressable blocks at a client via at least one tracking indicator; (**citation "tracking"**: section 5.4 step 704; column 15, lines 17-28; column 18, line 54 to column 19, line 51; column 5, lines 1-47; section 5.1; column 23, lines 11-28; column 23, lines 32-43; Tiles associated with ROI are retrieved and transmitted selectively from the storage of the server. When data blocks of the highest local resolution level stored in the client cache have resolution exceeding the image resolution selected, data are recalled from the

Art Unit: 2624

client cache. No request of data from the server is needed. Otherwise, data are needed from the server. Because data blocks are stored and available at the client up to the highest local resolution level for rendering the low resolution version, any resolution levels between the highest local resolution level stored in the client cache and the image resolution selected are retrieved from remote storage in the server. The n_x , n_y in Equation (1.3) are two indicators to represent the blocks to be retrieved.)

-- handling data communication between the client and a server via the decomposition level index, the tessellation block indices and the at least one tracking indicator. (column 18, line 54 to column 22, line 35; Sections 5.3 to -5.5 show how the tiles on the request list are handled such as retrieving, decoding, and rendering.)

Dekel further teaches:

-- wherein tracking comprises tracking local presence or absence of each set of the data sets, which correspond to different image resolution levels of the image; (The n_x , n_y in Equation (1.3) are associated with resolution levels.)

-- wherein handing data communication comprises requesting a spatial group of the plurality of addressable blocks, as needed based on the at least one tracking indicator, by referencing each block of the spatial group by decomposition level index and tessellation block indices; (See citation "tracking" above.)

-- displaying the image within a spatial region of interest using the data that has been addressed, tracked and handled. (column 15, line 60 to column 16, line 9; column 19, line 52 to column 20, line 24; claim 3 in column 31)

Art Unit: 2624

How Dekel teaches the features recited in the renumbered Claims 37-41, 45, and 47-48 are shown above in the cited passages for teaching the renumbered Claims 22, 23, 26-30, and 35.

For the renumbered Claim 43, Dekel teaches a system wherein tracking comprises toggling a Boolean flag. (column 5, lines 24-37; column 6, lines 7-47; The tiles are tagged (toggled) with `t_x`, `t_y`, and `t_resolution`. The client can decide which tiles are stored locally and which tiles need to be retrieved from the server. The decision can only be made from comparison of the `t_x`, `t_y`, and `t_resolution` of all the tiles required for rendering the ROI with the `t_x`, `t_y`, and `t_resolution` of the tiles already stored in the client. The comparison is a logical process. Thus the tags (`t_x`, `t_y`, and `t_resolution`) are considered by the Examiner as Boolean flags.)

d. For the renumbered Claims 49-61

For the renumbered claims, Dekel teaches a system (Fig. 1; column 3, line 65 to column 5, line 21) comprising an interface having modules.

Furthermore, Dekel teaches the system to have a memory device configured to store the plurality of addressable blocks. (image storage and caches shown in Fig. 1)

As discussed above with regard to Claims 1-48, Dekel teaches that the system performs functions for addressing, tracking communication, display tracking, reconstruction and has properties recited in the renumbered Claims 50-59. Therefore, Dekel also teaches the systems recited in the renumbered Claims 49-59.

For the renumbered Claims 60-61, Dekel further teaches that:

-- the system comprises a decompression module configured for decompressing each of the addressable blocks. (column 12, line 65 to column 13, line 8)

Art Unit: 2624

-- wherein the system comprises a picture archiving and communication system. (Fig. 1; Pictures are archived in image file storage 122. Fig. 1 shows a communication system for image data.)

e. For the renumbered Claims 69-76

For the renumbered Claim 69, Dekel teaches a computer program comprising:

-- a machine readable medium; (column 3, line 65 to column 4, line 30; The client computer inherently has a machine readable medium, such as hard disk or DRAM, to store the algorithm for carrying out the methods in the system recited above in Claims 1-2 and the renumbered Claims 3-61. Without the algorithm, the methods cannot function.)

-- an addressing module stored on the machine readable medium, wherein the addressing module is configured for indexing data by decomposition level and spatial coordinates of tessellation, wherein the decomposition level refers to data sets generated from an image by lossless wavelet decomposition, and the spatial coordinates refer to blocks tessellated from the data sets; (column 5, lines 24-46; column 5, line 60 to column 6, line 61; column 24, lines 17-21 and 58-65; Tiles are blocks that are addressable with a decomposition level index and tessellation block indices, such as shown in Eq. (1.1). Reversible wavelet transforms produce lossless wavelet decomposition.)

-- a tracking module stored on the machine readable medium, comprising

- a tessellated block tracking module configured for tracking presence or absence of each of the plurality of addressable blocks at a client via a first Boolean tag; (column 5, lines 24-37; column 6, lines 7-47; The tiles are tagged (toggled) with t_x , t_y , and $t_{resolution}$. The client can decide which tiles are stored locally and which tiles need to be retrieved from the server. The

Art Unit: 2624

decision can only made from comparison with the t_x, t_y, and t_resolution of all the tiles required for rendering the ROI with the t_x, t_y, and t_resolution of the tiles already stored in the client. The comparison is a logical process. Thus the tags (t_x, t_y) are considered by the Examiner as the first Boolean flags.)

- a decomposed level tracking module configured for tracking complete presence or complete absence of each of the data sets at a client via a second Boolean tag. (column 5, lines 24-37; column 6, lines 7-47; See above explanation. Thus the tags t_resolution are considered by the Examiner as the fsecond Boolean flags.)

How Dekel teaches the features recited in the renumbered Claims 70-74 are shown above in the cited passages for teaching their corresponding method claims.

Dekel further teaches computer program:

-- wherein the interface comprises a communication handling module configured for selectively communicating the spatial area of interest between the client and a server based on the decomposition level and spatial coordinates; (column 5, lines 24-37)

-- wherein the tracking module comprises an ordering module configured for handling the data in a desired order based on the decomposition level and spatial coordinates. (section 5.2 step 702; section 5.3 step 703)

Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2624

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The renumbered Claims 62-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dekel et al. (US patent 6,314,452) as applied to Claim 49, and further in view of Cooke, Jr. et al. (US patent 6,574,629.)

Dekel teaches the parent Claim 49.

However, Dekel does not teach one of more imaging systems recited in the above-listed claims.

Cooke teaches PACS system, comprising:

-- a PACS system; (column 33, lines 28-40)

-- one or more imaging systems comprising an MRI system, a computed tomography system, a positron emission tomography system, a radio fluoroscopy system, a computed radiography system, and an ultrasound system. (Fig. 1; column 9, line 66 to column 10, line 51; column 34, lines 1-20)

It is desirable to decode a localized portion of a medical image efficiently for viewing and analysis. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Dekel's system and method to store and transmit various images used in Cooke's PACS system because the combination facilitates retrieval of interested regions in medical images for medical analysis.

Conclusion

Art Unit: 2624

11. The prior art made of record in form PTO-892 and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 703 306-2796. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703 308-7452. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications. TC 2600's customer service number is 703-306-0377.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Wenpeng Chen
Primary Examiner
Art Unit 2624

March 15, 2005

